



# The benefits of scanning ewes - Western Local Land Services

There are a number of variables which influence the decision about the time of joining ewes, whether to join in a dry season and whether or not to scan joined ewes. In dry seasons, scanning results for spring joined flocks can often be lower than expected with low conception rates, high dry ewe numbers and low twinning rates.

The reasons for lower scanning rates could be:

- ewes in lower body condition due to reduced pasture availability
- rams in lower body condition with less desire to work
- record heat events leading to embryo loss, reduced foetal growth rate, poor ram fertility and a physiological 'shutdown' by stressed ewes.

Considering these factors, scanning ewes and managing them accordingly is a highly recommended practice.

Scanning is a highly valuable tool to identify pregnant and dry ewes in a flock. The ewes that are in lamb can then be preferentially managed, and there is the option to sell, rejoin or retain dry ewes for wool production.

Using the Stockplan© decision support software, in conjunction with the NSW Department of Primary Industries Feed cost calculator, a cost benefit of scanning ewes was determined.

The parameters used were:

- a 5,000 ewe merino flock
- medium frame size, 50kg ewes
- selling price of ewes \$160/head as breeders, \$3.90/kg dressed weight over the hooks (average dressing percentage of 40%)
- wool price 2000c/kg clean, average wool cut 7kg/head, yielding 60%
- pasture nutritional value based on predominantly native dry pasture, typical of the Balranald region during spring: 90% dry matter, 6MJ ME/kg DM, NDF\* value 60 (NDF\* relates to a feeds 'intake' potential. The higher the value the lower the digestibility and intake)
- barley price \$350/tonne
- hay price \$350/tonne.

Table 1 illustrates the amount of pasture each week saved by selling dry ewes of a 5,000 ewe flock at various scanning percentages.

Scanning %	95	90	85	80	75
Pasture (tonne/week)	2.6	5.2	7.8	10.4	13

Table 1: The amount of pasture consumed by dry ewes at varying scanning percentages for a 5,000 ewe flock.

The pasture required by dry ewes may be more beneficial to pregnant ewes in a tough season, particularly when pasture supply is deteriorating as additional supplementary feed costs can escalate.

An example of the cost of feeding dry ewes a supplementary ration of 70% barley and 30% wheaten hay per week is included in Table 2.

Scanning %	95	90	85	80	75
Grain	300	601	902	1,203	1,504
Hay	172	345	518	691	864
Total \$	472	946	1,420	1,894	2,368

Table 2: The cost of feeding a dry ewe a ratio of 70% barley and 30% wheaten hay per week at various scanning percentages for a 5,000 ewe flock.

This cost could be better spent feeding pregnant ewes that have increasing nutritional demands as they progress through pregnancy. For example, single and twin bearing ewes at the point of lambing have a feed requirement of 1.5 and 2.5 times that of a dry ewe or wether. Their energy demands increase quickly from three weeks prior to lambing as this is when up to 70% of foetal growth occurs. Ewes need to be in a forward condition to be able to meet this demand.

### Recouping cost of scanning

Scanning costs vary with location and scanning choices (i.e. scanning for wet/dry, multiples, early/late). Generally, scanning rates can range from \$0.60/head to \$1/head. There is also additional handling costs associated with scanning, which include mustering and labour for the scanning procedure.

There are many ways that the cost of scanning is returned. These include:

- saving feed costs
- greater pasture for pregnant ewes
- improved flock fertility (a maiden ewe that is dry will rear 10-15% less lambs/year)
- increased value of lambs as there is less chance of long term effects of poor nutrition during pregnancy. These can include:
  1. slower growth
  2. less muscle development
  3. compromised immune system
  4. lower adult reproductive performance.



The potential income from selling dry ewes will vary with scanning percentage. Ewes could be sold on the restocker market as breeders or directly over the hooks. The figures in Table 3 can be adjusted to suit the individual sheep enterprise and are to be used as a guide only.

Scanning %	95	90	85	80	75
Breeders \$	40,000	80,000	120,000	160,000	200,000
Over the hooks \$	19,500	39,000	58,500	78,000	97,500
Wool income \$	21,000	42,000	63,000	84,000	105,000

Table 3: The potential return from selling dry ewes at various scanning percentages for a 5,000 ewe flock.

It is important to remember that selling dry ewes will reduce flock numbers and alter flock structure, which needs to be included in a flock management plan. It is evident that the lower the potential scanning percentage is, the greater the importance of scanning. Scanning pays no matter the season as it allows more accurate management of a flock's production cycle.

For further information contact Land Services Officer, Tanisha Shields on 0447 642 131 or [tanisha.shields@lls.nsw.gov.au](mailto:tanisha.shields@lls.nsw.gov.au).